

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 648 AND MARLEY STATION RD./MARLEY NECK BLVD. IN ANNE ARUNDEL COUNTY. THE WORK IS NECESSITATED BY LANE USE REVISIONS AND THE UPGRADE OF PEDESTRIAN FACILITIES. MD 648 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE WITH EXCLUSIVE- PERMISSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 648 AND SIDE STREET SPLIT PHASING. THE ALTERNATE PEDESTRIAN PHASES FOR THE NORTH AND SOUTH LEG OF MD 648 AND THE CONCURRENT PEDESTRIAN PHASE FOR THE EAST LEG (MARLEY NECK BLVD.) AND WEST LEG (MARLEY STATION RD.) WILL REMAIN.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

QUANTITY	DESCRIPTION
NONE	

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
7 CY	TEST PIT EXCAVATION
1925 LF	5 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
1815 LF	5 IN. YELLOW HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
1445 LF	12 IN. HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
160 LF	24 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKING
3 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
8 EA	L.E.D. 16 IN. COUNTDOWN PEDESTRIAN
8 EA	AUDIBLE /TACTILE PEDESTRIAN PUSHBUTTON AND SIGN
8 CY	CONCRETE FOUNDATION FOR SIGNAL
7 EA	10 FT. BREAKAWAY PEDESTAL POLE
2 EA	CONDUIT BEND IN EXISTING FOUNDATION
LS	REMOVE AND DISPOSE OF MATERIAL AND EQUIPMENT
3 EA	VIDEO DETECTION CAMERA AND CABLE (TERRA)
945 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO. 14 A.W.G.)
1170 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO. 14 A.W.G.)
130 LF	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
5 EA	3/4 IN. X 10 FT. GROUND ROD
10 LF	1 IN. DETECTOR SLEEVE FLEXIBLE, LIQUID-TIGHT CONDUIT
140 LF	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
100 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
180 LF	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - SLOTTED
7 EA	CUT, CLEAN, GALVANIZE, AND CAP TRAFFIC SIGNAL STRUCTURE
5 EA	ELECTRICAL HANDHOLE
35 LF	WOOD SIGN SUPPORTS 4 IN. X 6 IN.
1 EA	M4-6 (24" x 12") SIGN - WOOD POST MOUNT
1 EA	M4-6(1) (24" x 12") SIGN - WOOD POST MOUNT
1 EA	R3-9b (24" x 36") SIGN - WOOD POST MOUNT
1 EA	R3-9a (30" x 36") SIGN - WOOD POST MOUNT
4 EA	RELOCATE EXISTING SIGN AND SUPPORT
2 EA	RELOCATE EXISTING SIGNAL HEAD
715 LF	DISCONNECT, PULL BACK AND REROUTE CABLE
70 LF	SAWCUT

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

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ASSISTANT DISTRICT ENGINEER - MAINTENANCE
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UTILITY ENGINEER
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CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

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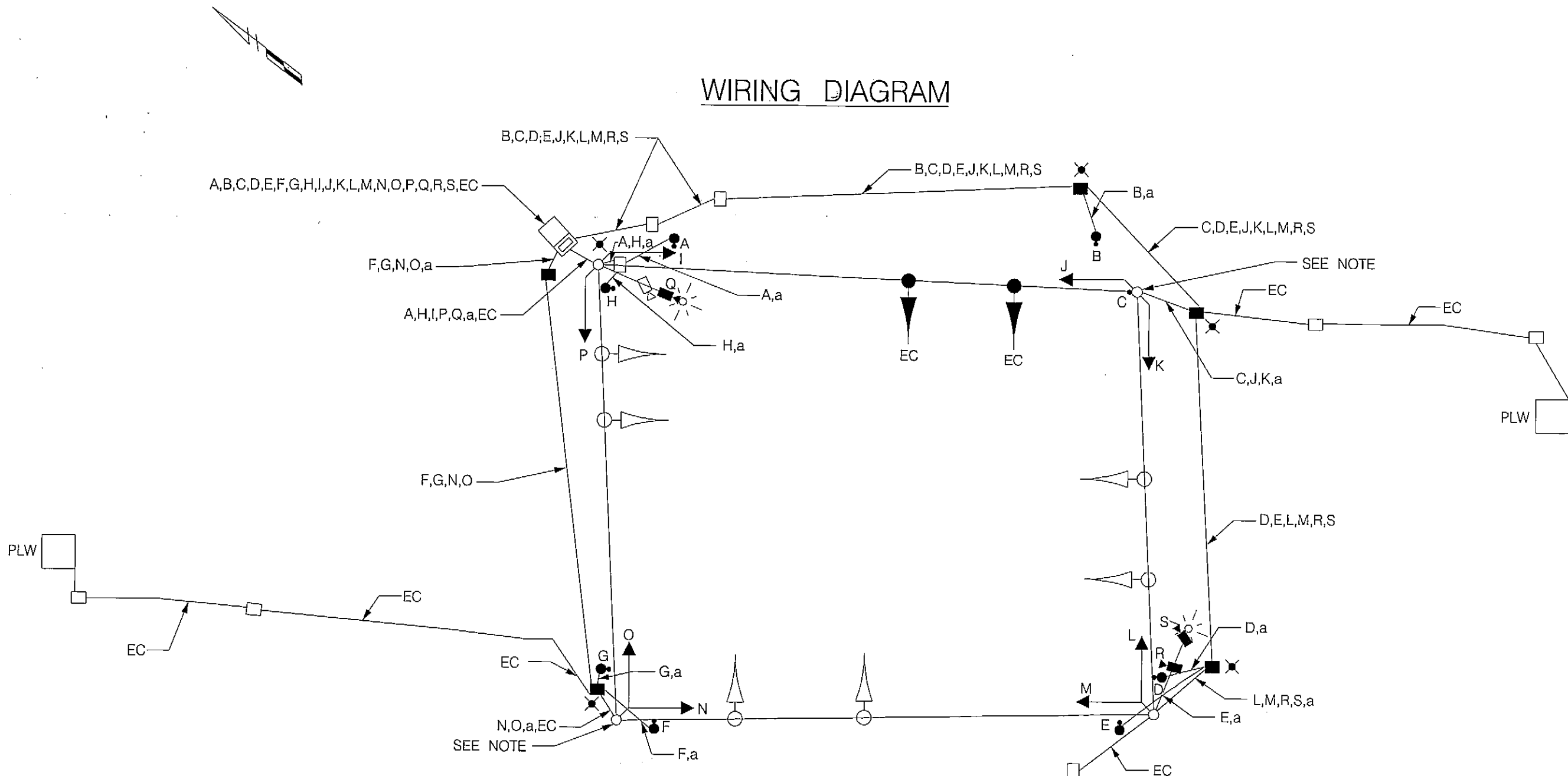
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PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 & 5	←G	R	←G	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 & 5 CHANGE	←G	R	←G	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 & 6	R	R	←G	←G	R	R	R	R	FL-DW	DW	DW	FL-DW	DW	DW	DW	DW
PED CLEAR	R	R	←G	←G	R	R	R	R	FL-DW	DW	DW	FL-DW	DW	DW	DW	DW
1 & 6 CHANGE	R	R	←G	←G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	←G	G	R	R	R	R	R	R	DW	WK	WK	DW	DW	DW	DW	DW
PED CLEAR	←G	G	R	R	R	R	R	R	DW	FL-DW	FL-DW	DW	DW	DW	DW	DW
2 & 5 CHANGE	←G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PED CLEAR	G	G	G	G	R	R	R	R	FL-DW	FL-DW	FL-DW	FL-DW	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	R	R	R	R	←G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	R	R	R	R	←G	G	R	R	DW	DW	DW	DW	WK	WK	DW	DW
PED CLEAR	R	R	R	R	←G	G	R	R	DW	DW	DW	DW	FL-DW	FL-DW	DW	DW
3 ALT CHANGE	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	←G	G	DW	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	R	R	R	R	R	←G	G	DW	DW	DW	DW	DW	DW	WK	WK	DW
PED CLEAR	R	R	R	R	R	←G	G	DW	DW	DW	DW	DW	DW	FL-DW	FL-DW	DW
4 ALT CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



NOTE:
DISCONNECT EXISTING LOOP DETECTOR CABLE FROM THE EXISTING LOOP DETECTOR ON MD 648 AND PULL BACK TO THIS POINT. REINSTALL CABLE THROUGH NEW CONDUIT TO THE PROPOSED LOOP DETECTOR.

WIRING KEY

A-H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
I-P	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
Q-S	VIDEO DETECTION CABLE
a	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
PLW	PROPOSED LOOP WIRE
EC	EXISTING CABLE
×	GROUND ROD

TRAFFIC CONCEPTS, INC.

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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 648 AND MARLEY STATION RD./
MARLEY NECK BLVD.
GLEN BURNIE, MARYLAND

GENERAL INFORMATION PLAN

SCALE NONE DATE 10-29-2012 CONTRACT NO. BW996MB2

DESIGNED BY	M. ROSEN	COUNTY	ANNE ARUNDEL
DRAWN BY	M. ROSEN	LOGMILE	03864801.07
CHECKED BY	K. SCHMID	T.I.M.S. NO.	J-B45
F.A.P. NO.	NA	TOD NO.	

DRAWING NO. TS-3378E GI SHEET NO. 2 OF 3